

# PATENT SPECIFICATION :



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260,375

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## COMPLETE SPECIFICATION.

### Appliance for Teaching Music.

I, CARLO FANELLA, of 57, Corso Federico II, Aquila, Italy, a subject of the King of Italy, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The invention relates to musical appliances by which immediately to find tonalities and provide an indication of several hundreds of exercises and scales without daily consultation of sheets of music of the kind in which discs bearing suitable indications are mounted behind apertures in casings.

According to the present invention the appliance is characterised by a musical synoptical table, an indicator superposed thereon serving to point out the clef tonality—major or minor—the initial note of the exercise to be fixed with precision on said synoptical table, and by indication placed between the openings this indication, when completed with the other particulars written on the discs, as distances intervals of scales and similar indications for the arpeggios, serving exactly to show the exercise to be determined and performed.

An embodiment of the invention is illustrated in the accompanying drawings in which Fig. 1 shows an elevation of the appliance adapted for singing and musical instruments in general. Figs. 2 and 3 are cross sections on the line I—II and III—III, Fig. 4 is a longitudinal section on the line IV—IV; Fig. 5 is an elevation of the rotatable discs seen from the internal upper side of the device; Fig. 6 shows the appliance associated with the music desk of the piano; Fig. 7 illustrates to a larger scale the rotatable discs seen from the front side with the indication of the exercises; Fig. 8 illustrates the disposition of the note tonalities, small pinions being provided

for the fingers to rotate the discs by means of worms from the front side of the discs; Fig. 9 is a longitudinal section on line V—V of Figs. 7 and 8; Figs. 10 and 11 illustrate the practical application of the device.

On the back of the appliance and rotatable about pivots 2—2<sup>1</sup>—2<sup>11</sup>—2<sup>111</sup> discs 4, 5, 6, 7, are disposed within corresponding recesses as illustrated in Figs. 5 & 7. The front side of the casing 3 is provided with openings 12, 13, 14, 15 protected by a glass or transparent celluloid.

On the glass or celluloid there is a frame serving as a guide for a longitudinally sliding index 10 having inside a second slide 11 which may be transversely displaced.

The discs may be rotated from the upper side of the table or if desired from the bottom either from the outer side of the appliance, where they project as illustrated in Fig. 1 or from the face by means of pinions as shown in Fig. 8 the discs bearing besides the word "stop" the following legends:

Disc 4. Opposite or contrary movement—harmonic—melodic—mixed—in thirds—in octaves—chromatic—an arrow.

Disc 5. Octave—third—sixth—tenth—an arrow.

Disc 6. Perfect or common major—perfect minor—dominant seventh—diminished seventh—ninth.

Disc 7. Fundamental or root position—first inversion—second inversion—third inversion—fourth inversion.

On the front face 8 there are traced two or more musical staves in treble, bass clef or the like. The number of staves and the indication of the clef and exercises is of course variable and adapted to the music to be pointed to and the instrument for which said music is desired.

Said staves are divided into sixteen

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bars in each bar the sharps and flats are progressively indicated and arranged with the notes of the corresponding tonalities the major keys being in the upper part and the minor keys in the lower part of the table.

In the intermediate space of the table and between the openings there is the indication of the scale or arpeggio to be performed, namely; scale . . . . at the distance of . . . . tone or key of "arpeggio on the chord of . . . . on . . . . tone or key of" the asterisk indicating the note and bar of the musical table which is going to be fixed by the index.

The appliance above specified as generally constructed for the piano will be an integral part of the stand or desk as illustrated in Fig. 6, but it may be also hooked to the centre of the stand, and hidden with the same inside the case of the piano as illustrated in Figs. 10 a, b, c. In the case of other instruments the appliance is hooked to their independent stand.

The appliance according to the invention may be constructed of any materials, common or high quality, as aluminium, ebonite, celluloid, ivory, mother-of-pearl and so on and in whatever dimensions desired.

#### USE AND OPERATION.

1. To find the tonalities, which are nearly always forgotten, once the appliance has been set as above mentioned, it will be sufficient simply to look at the table on which they are progressively disposed, the major in the upper part, the corresponding minor in the lower part.

2. For the indication of musical scales the index 10 is to be moved and stopped on a division or bar of the table, whereupon the internal slide 11 is displaced so as to uncover the upper or lower part of the staffs, then the two discs on the left side 4 and 5 are rotated so as to fix the fundamental note on the table and the tone, the distance and the like in the openings 12 and 13 of the appliance.

#### EXAMPLE.

Suppose scale of C sharp major to be performed at the distance of an octave.

By displacing the index the fundamental note C sharp major is uncovered, then the first disc is turned so that the arrow may appear in the corresponding opening, then the second disc is turned till the word "octave" appears. The scale may then be performed according to the indications and in the same way the following scales may be indicated.

Major and minor scales at the distance of an octave, third, sixth, tenth	N.120	
Id. in thirds	N.120	65
Id. in octaves	N.120	
Minor scales, harmonic, melodic mixed, at distance of an octave	N. 45	
Id. for contrary movement in major and minor tone	N. 30	70
Id. chromatic at a distance of an octave, third, sixth, tenth	N. 4	
Total	N.439	

The arrow on the first disc is to be used only for the major and minor tones, which are already indicated by the table; it would be of no use to have a double indication. The arrow on the second disc is to be used only when performing scales in opposite movement.

3. For the performance of arpeggios the preceding discs are covered with the word "stop" and by means of the index and discs 6 and 7 the key, chord and position of the arpeggio desired are fixed.

#### EXAMPLE.

Suppose it is desired to perform arpeggio of the common major chord in key C on the fundamental note. The index is moved so as to expose C major, the third disc is turned to "perfect major" and fourth to the "fundamental note". According to these indications the arpeggio is performed and likewise all the other arpeggios are executed;

Arpeggios of the common major chord in key C on the fundamental and I and II inversions	N. 3	
Id. minor on the fund. and I, II	N. 3	
Id. of seventh dominant on the fund. and I—II—III inversions	N. 4	100
Id. of seventh diminished	N. 4	
Id. of ninth on the fund. and I—II—III—IV inversions	N. 5	
	N.19	105

and each for the tonalities in the table that is a total of  $30 \times 19 = 570$  arpeggios.

In short the appliance according to the invention is provided with a synoptical table for the indication of tonalities and shows the fundamental note the tonality and distance of 439 musical scales, moreover the fundamental note the tonality and inversions of 570 arpeggios for a total of more than a thousand of the principal musical exercises which in general are neglected when not entirely forgotten. It is clear that by conveniently modifying the legends of the discs the number and species of exercises may be varied at will. The appliance being in sight

of the pupil improve his musical memory, represents a facilitation to the execution of a determined group of progressive exercises and serves at the same time for a pleasant technical exercise of the fingers while the daily consideration of musical sheets is avoided.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A musical appliance for assistance in learning and performing exercises comprising a casing provided with openings and internal rotatable discs bearing legends to be visible through said openings, characterised by a musical synoptical table, an indicator superposed thereon serving to point out the clef, tonality—major or minor—the initial note of the exercise to be fixed with precision on said synoptical table, and by indication placed between the openings this indication, when completed with the other particulars written on the discs, as distances, intervals of scales and similar indications for the arpeggios, serving exactly to show the exercise to be determined and performed.

2. A musical appliance as claimed in Claim 1 characterised in that the indi-

cator is slidable along the front and openings in combination with a second inner slide running transversely of the direction of the other.

3. A musical appliance as claimed in Claim 1 characterised in that the internal discs project beyond the upper or lower part of the casing (Fig. 1), to be rotated by hand or by gears as in the modification illustrated in Fig. 7.

4. A musical appliance as claimed in Claim 1 characterised by the combination of the musical synoptical table with the indicator slide and internal discs for the determination of each exercise to be performed.

5. A musical appliance as claimed in Claims 1 and 2 characterised in that it may also form an integral part of the inner stand of the piano case.

6. A musical appliance for assistance in learning and performing exercises constructed and arranged substantially as described with reference to the accompanying drawing.

Dated this 19th day of August, 1925.

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and  
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Agents for the Applicant.

[This Drawing is a reproduction of the Original on a reduced scale.]

Fig. 1

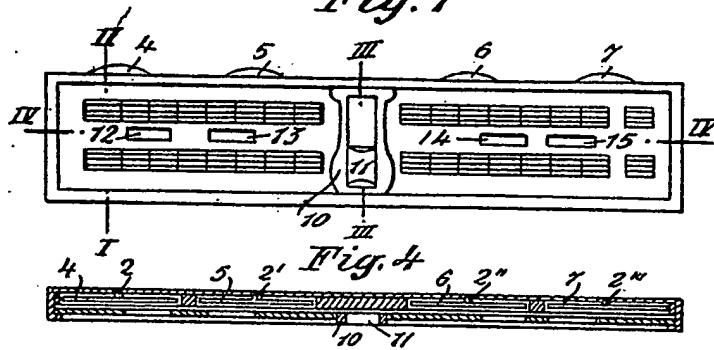


Fig. 4

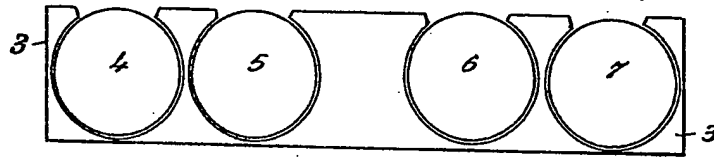


Fig. 6

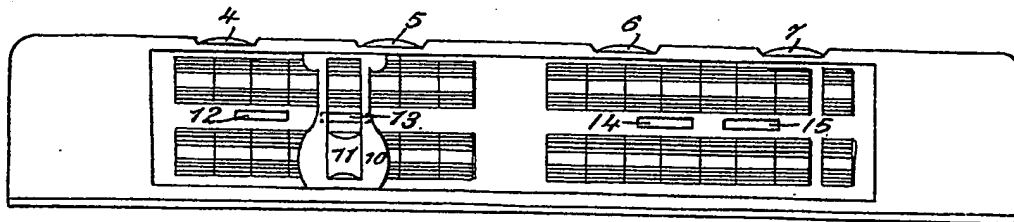


Fig. 7

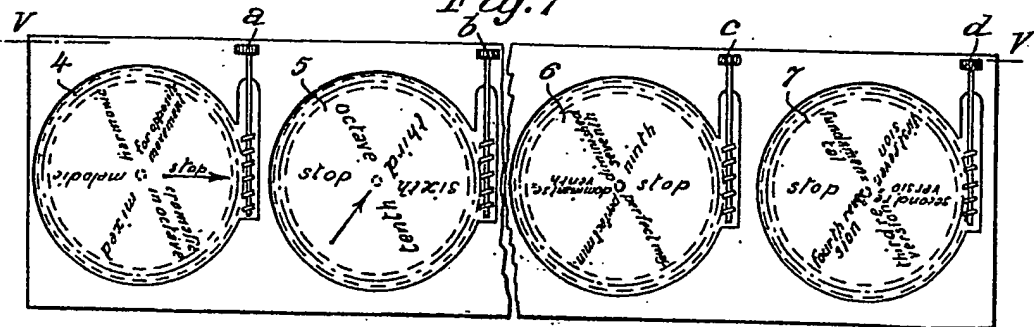


Fig. 8



Fig. 9



Fig. 10

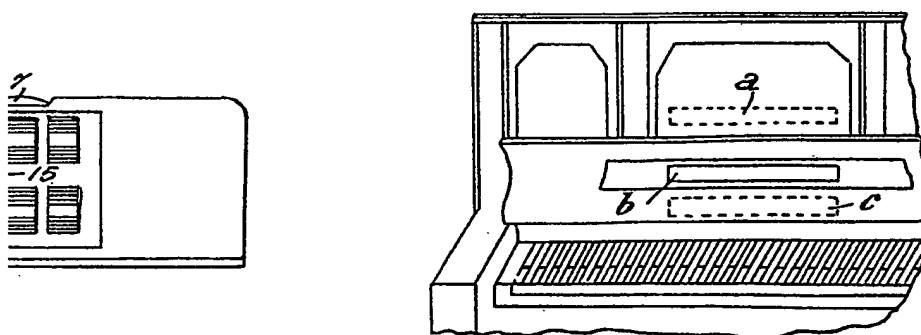


Fig. 11

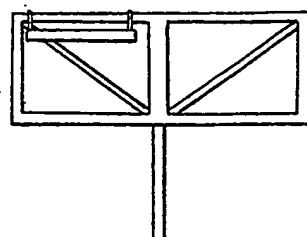
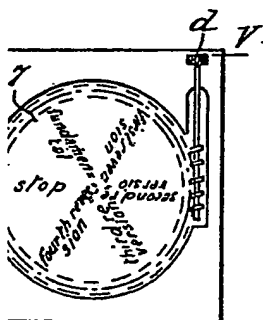
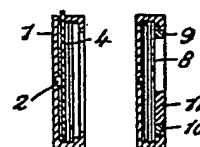


Fig. 2 Fig. 3



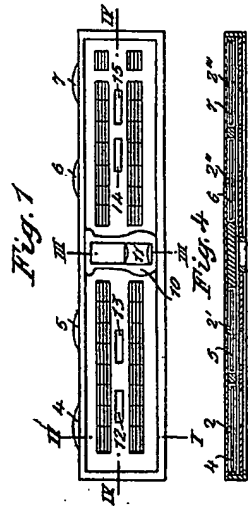


Fig. 1

Fig. 8

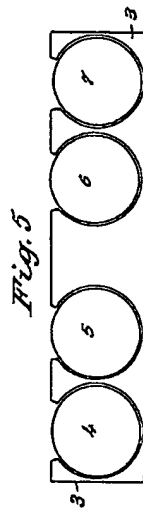
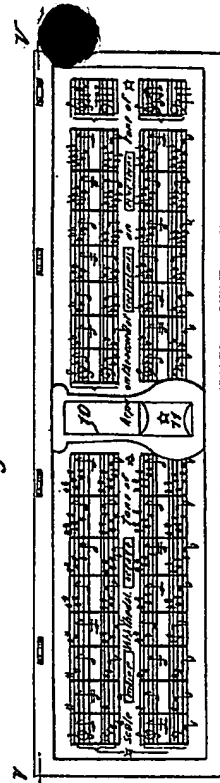


Fig. 5



Fig. 9

Fig. 6



Fig. 10

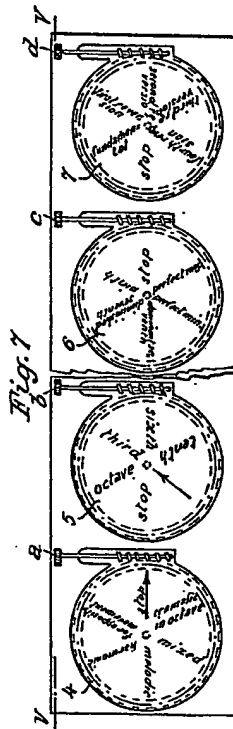
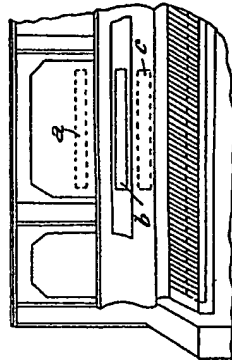


Fig. 7

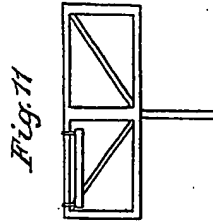
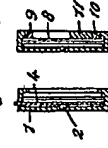


Fig. 11

Fig. 2 Fig. 3



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